**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Honors Algebra I**

**The following problems are due Monday, September 29th. You may use any resource to solve these problems except if that resource is a person. These are standards that you have been taught in previous years. On Thursday of this week I will set aside 5 minutes to help you with any questions you may have in solving these problems. YOU MUST SHOW ALL WORK!**

1.) There are 360 students at Our Lady of Good Council Grade School, where the ratio of boys to girls is 4:5. There are 420 students at St. Bede’s Grade school, where the ratio of boys to girls is 4:3. The two schools held a dance and all students from both schools attend. What was the ratio of the girls to boys at the dance?

2.) What is the area and perimeter of the shaded area shown below?



1. Area \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Perimeter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12 inches

1. nches 12 inches 12 inches

3.) 

4.) What is the median price of homes in Southhampton, according to the table below?

|  |  |
| --- | --- |
| Home | Price |
| 1 | $144,000 |
| 2 | $250,000 |
| 3 | $300,000 |
| 4 | $186,000 |
| 5 | $100,000 |

5.) What is the length of side c (hypotenuse), the longest side of a right triangle?

c

20

21

6.) What is the area of the shaded part of the rectangle below?

14 in

20 in

7.) Amanda went to Costco to buy 4 new tires for her car for the price of $200 per tire. Costco had the following sale: ***Buy 3 tires and get the 4th tire for 75% off!*** In addition, there was a sales tax at 8%. How much money will Amada save buying the 4 tires with the sale price versus paying full price for all 4 tires?